



## BRIEF SUMMARY

Highly motivated IT student with a strong foundation in programming and software development. Proficient in various programming languages and experienced in creating and maintaining web applications. Solid understanding of database management and systems administration. Quick learner with excellent problem-solving skills. Seeking an opportunity to apply and expand technical skills in a dynamic and challenging IT environment.

## KEY EXPERTISE

Python Java Web Development Data Structures OOPs DBMS MongoDB MySQL Networking Internet of Things

## EDUCATION

**Sri Sivasubramaniya Nadar College of Engineering** 2021 - 2025  
B.Tech. - Information Technology | CGPA: 8.03 / 10.00

**CEOA MAT HR SEC SCHOOL, Madurai** 2021  
12<sup>th</sup> | Tamil Nadu Higher Secondary board | Percentage: 95.49 / 100.00

**Dolphin MAT HR SEC School, Madurai** 2019  
10<sup>th</sup> | TNBSE | Percentage: 96.20 / 100.00

### Course Works - Key Courses Taken :

Data structures and Algorithms  
OOPs  
Database management  
Design patterns  
Advanced data structures  
Microprocessor and Microcontroller  
Digital networks  
AI and ML - Honors

## AWARDS AND SCHOLARSHIPS

- Guinness World Record
- Elite World Record

## PROJECTS

**PULSE BASED DIAGNOSTIC SYSTEM FOR SIDDHA AND VARMA** 01 Mar, 2023 - 26 Aug, 2024

Mentor: Dr. R. Srinivasan | Team Size: 4

Key Skills: Sensors Arduino ESP Internet of Things Mobile Application Development

Developed an advanced machine capable of accurately calculating an individual's pulse, leveraging cutting-edge technology. This device is coupled with an intuitive mobile application that seamlessly records crucial health data. The application harnesses the principles of Siddha medicine to offer tailored recovery methods. By analyzing the pulse data, it provides personalized recommendations aligned with Siddha medicine's holistic approach. This integration empowers users to take control of their health journey. The combination of the machine's precision and the mobile app's insightful guidance fosters an effective and personalized wellness experience, grounded in the time-honored principles of Siddha medicine.

**Arivagam.** 22 Jun, 2023 - 05 Aug, 2023

Team Size: 4

Key Skills: Socket Programming API NLTK MongoDB Flask Web Development

Project Link: <https://github.com/SujayR23/Arivagam>.

I've created an advanced plagiarism checker system that possesses exceptional accuracy in assessing the similarity index between two research documents. This robust system not only identifies potential instances of plagiarism but also maintains a comprehensive history of previous records. By combining sophisticated algorithms and thorough analysis, the system ensures reliable and precise results. It contributes significantly to academic integrity by assisting researchers and educators in upholding originality standards. With its history records feature, the system offers insights into the evolution of document similarities over time, enhancing its utility as a valuable tool for plagiarism detection and prevention.

**Chat Website** 07 Jul, 2023 - 03 Aug, 2023

Team Size: 2

Key Skills: Networking Socket.io Socket Programming Flask Web Development

Project Link: <https://github.com/SujayR23/chatApp>

Built a chat web application with Python Flask, allowing users to join group chats using unique codes. Leveraged Flask's features to manage routing and WebSocket communication, enabling seamless real-time conversations within designated groups. Experience dynamic chatting by simply entering the group code and engaging with fellow members in the group chat.

Eye Movement Analysis

20 Jul, 2023 - 01 Aug, 2023

Mentor: Dr. S. Karthika | Team Size: 2

Key Skills: Opencv Machine Learning Web Development Flask MongoDB Deployment

Project Link: <https://github.com/SujayR23/eyeDetection>

I have successfully developed a website that employs advanced technology for real-time eye movement detection, processing frames sequentially. The system captures these frames and stores them as both videos and images within a robust database. This database ensures secure and organized storage of user-generated content. Users can later access these stored videos for analysis. The website is now live and fully operational, offering an intuitive interface for users to interact with the eye movement detection system. Through this innovative platform, users can conveniently upload videos, detect eye movements, save them, and subsequently analyze the recorded content. The integrated database ensures efficient retrieval and secure management of stored data, enhancing user experience and contributing to a comprehensive eye movement analysis solution.

Plagiarism Checker

15 Apr, 2023 - 20 Jul, 2023

Mentor: Dr. A. Sandana Karuppan | Team Size: 6

Key Skills: Data Structures Algorithms MongoDB Flask Web Development JIRA

Project Link: <https://github.com/SujayR23/plagiarismChecker>

Created an advanced plagiarism checker system that possesses exceptional accuracy in assessing the similarity index between two research documents. This robust system not only identifies potential instances of plagiarism but also maintains a comprehensive history of previous records. By combining sophisticated algorithms and thorough analysis, the system ensures reliable and precise results. It contributes significantly to academic integrity by assisting researchers and educators in upholding originality standards. With its history records feature, the system offers insights into the evolution of document similarities over time, enhancing its utility as a valuable tool for plagiarism detection and prevention.

Smart Agriculture

04 Oct, 2022 - 01 Nov, 2022

Team Size: 4

Key Skills: Arduino ESP Sensors Cloud Mobile Application Development

Developed an IoT device tailored for smart agriculture, integrating innovative features such as early rain detection, real-time soil moisture monitoring, and automated irrigation control. This comprehensive solution optimizes farming practices by delivering timely information to farmers. Additionally, I've created a user-friendly mobile application that enables remote access, putting valuable insights and control at the farmers' fingertips. By harmonizing technology and agriculture, this system enhances productivity and sustainability. It embodies a holistic approach to modern farming, fostering efficient resource management and yielding higher yields while offering user convenience through seamless mobile interaction.

Parcel Service System

18 May, 2022 - 10 Sep, 2022

Mentor: Dr. S. Karthika | Team Size: 6

Key Skills: Data Structures Algorithms JSON Python Tkinter JIRA

Project Link: <https://github.com/SujayR23/parcelServiceSystem>

I've successfully crafted a parcel service system featuring a distinctive packing ID assigned to each package. This system boasts real-time tracking capabilities for both pending and delivered parcels, providing users with up-to-the-minute information on their shipments. Seamlessly integrated with individual user accounts, the platform ensures a personalized experience. Users can easily monitor the status of their parcels, enhancing transparency and convenience. The unique packing ID not only simplifies parcel identification but also contributes to efficient logistics management. This innovative system streamlines the parcel delivery process, bolstering customer satisfaction and optimizing the overall user experience.

Tic Tac Toe game & Music player app & Dice roller

21 Jul, 2022 - 03 Aug, 2022

Team Size: 1

Key Skills: Figma Problem Solving UI Development Mobile Application Development

Project Link: <https://github.com/SujayR23/Apps>

Tic Tac Toe: Developed a dynamic Tic Tac Toe game using Flutter with skills in UI design, state management, and interactive app development. Music player: Developed a dynamic music player using Flutter, seamlessly integrating audio playback controls with UI animations. Dice roller: Created an immersive dice roller app using Flutter, combining sleek visuals with random number generation.

PUBLICATIONS / RESEARCH / WHITE PAPERS

PULSE BASED DIAGNOSTIC SYSTEM FOR SIDDHA AND VARMA

01 Aug, 2024

Medical research paper | Pulse based diagnostic system for siddha and varma treatment | Mentor: Dr. T. Sree Sharmila |

No. of Authors: 4

Key Skills: Internet of Things Sensors

Conceptualized and led the creation of a holistic health management system that combines advanced pulse analysis technology with an intuitive mobile application which intelligently captures and analyzes an individual's pulse waveform for comprehensive health insights with an user-friendly mobile application that empowers users to record their health data, including daily activities, dietary habits, and exercise routines and to provide personalized health recommendations through the mobile application, promoting a balanced and holistic approach to wellness.

ACHIEVEMENTS

- Sairam College - Hackathon - 4th prize
- Jaipur - Idea Hackathon - Finale elimination
- PSG College - Hackathon - Finalist - Final round on Aug 24th

## ASSESSMENTS / CERTIFICATIONS

### Python Programming

Aggregate: 90.0 / 100.0

### Programming in Java

Aggregate: 70.0 / 100.0

### Object Oriented Programming

Aggregate: 70.0 / 100.0

## SEMINARS / TRAININGS / WORKSHOPS

**IoT Workshop** Institute Name: SSN College of Engineering, Chennai

04 Jan, 2023 - 07 Jan, 2023

**Key Skills:** Internet of Things Sensors Arduino

Led a dynamic IoT workshop, guiding participants from diverse backgrounds in exploring the transformative world of IoT. Delivered engaging sessions on sensor integration, data communication, and cloud connectivity, fostering hands-on learning. Facilitated practical exercises, empowering participants to build IoT devices and analyze real-time data. Received acclaim for simplifying complex concepts, fostering an inclusive learning environment, and inspiring innovation. Contributed to participants' skill development and IoT literacy through clear communication and interactive teaching.

### Inspire Camp

**Institute Name:** Mohamed Sathak Engineering College, Ramanathapuram

**Key Skills:** Teamwork Leadership Volunteering

Participated in a transformative 7-day inspire camp, honing teamwork and leadership skills through diverse programs. Engaged in energy-saving and robotics sessions, gaining valuable insights.

## WEB LINKS

- Github - <https://github.com/SujayR23>
- Other - <https://www.hackerrank.com/23sujay23>

## PERSONAL DETAILS

**Gender:** Male

**Marital Status:** Single

**Current Address:** KASTHURI ILLAM, PLOT NO:29, RMS COLONY, MUTHUPPATTI, MADURAI-625003, Madurai, Tamil Nadu, India - 625003

**Emails:** sujay2110836@ssn.edu.in , 23sujay23@gmail.com

**Date of Birth:** 10 Sep, 2003

**Known Languages:** Tamil, English, Hindi

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